CALFED Bay-Delta Program

Ecosystem Restoration Program Planning

Development of Implementation Objectives and Targets for Key Resources

Ecological Zone: Mainstem Rivers

Ecological Subzone: San Joaquin River (Gravelly Ford to Mendota Pool)

KEY RESOURCES AND STREAM HABITATS:

Resource Guild: Native resident fish community

Stream habitat: All life stages

Implementation Objective: Maintain diversity of native fishes.

Target: No numeric target.

Resource Guild: Macroinvertebrates

Stream habitat: Larval stages.

Implementation Objective: Maintain diverse community of macroinvertebrates.

Target: No numeric target.

KEY ECOSYSTEM FUNCTIONS/PROCESSES AND STRESSORS:

Function/Process: Hydrologic Cycle

Stressor: Upstream water diversions significantly reduce streamflow; in most water years, reach receives no flow except for flood control releases.

Implementation Objective: Maintain an active stream channel.

Target: No numeric target.

Action: Evaluate the potential for flow restoration.

Function/Process: Connectivity between key habitats

Stressor: Up and downstream migration of native anadromous and resident fishes is blocked in this reach by the lack of continuous streamflow from Friant Dam to the confluence with the Merced River.

Implementation Objective: Restore continuous streamflow between Friant Dam and the confluence with the Merced River.

Target: No numeric target.

Action: Evaluate the feasibility of maintaining continuous streamflow.

Function/Process: Sediment Budget/Channel Morphology

Stressor: High rates of sediment input and impaired sediment transport due to altered streamflow result in accumulation of fine sediments.

Implementation Objective: Restore balanced sediment budget.

Target: Maintain sediment input in balance with transport from the system.

Action: Encourage implementation of improved land management and livestock grazing practices along stream/riparian zones to reduce streambank erosion and sediment input.

Implement management program for fine sediments.